

What is claimed is:

Sub 917
5 1. A cleaning method of treatment equipment, comprising:
a step of, while supplying a cleaning gas containing a
substance directly complexing prescribed metal in a treatment
chamber of the treatment equipment that treats a substrate,
exhausting the cleaning gas from the treatment chamber.

2. The cleaning method of claim 1:

wherein the substance of directly complexing is carboxylic
acid or a derivative of carboxylic acid.

10 3. The cleaning method of claim 2:

wherein the carboxylic acid or the derivative of carboxylic
acid is a substance expressed by the following equations: RCOOH ,
 RCOOR' , or $\text{R}(\text{COOH})_n$ (R , R' are hydrocarbon group capable of
containing halogen atom, n being an integer).

15 4. The cleaning method of claim 3:

wherein the substance for directly complexing is
trifluoroacetic acid.

5. The cleaning method of claim 1:

20 wherein the treatment equipment is film formation
equipment.

6. The cleaning method of claim 1:

wherein the prescribed metal is copper.

7. The cleaning method of claim 1:

25 wherein the cleaning gas contains an additive that promotes
complexing of the prescribed metal.

8. The cleaning method of claim 1:

wherein the additive is water vapor.

9. A cleaning method of treatment equipment, comprising

the steps of:

supplying, in a treatment chamber of treatment equipment treating a substrate, a cleaning gas containing a substance directly complexing prescribed metal; and

exhausting the cleaning gas from the treatment chamber.

10. The cleaning method of claim 9:

wherein the steps of supplying the cleaning gas and of exhausting the cleaning gas are alternately repeated.

11. Treatment equipment, comprising:

a treatment chamber for treating a substrate;

a susceptor disposed in the treatment chamber and on which the substrate is disposed;

a treatment gas supply system for supplying, in the treatment chamber, a treatment gas containing copper as a component;

an evacuation system for evacuating the inside of the treatment chamber; and

a TFA supply system for supplying trifluoroacetic acid in the treatment chamber.

12. The treatment equipment of claim 11:

wherein the treatment gas supply system comprises a treatment agent tank, treatment gas supply piping connecting the treatment chamber and the treatment agent tank and a treatment agent vaporizer disposed in the middle of the treatment gas supply piping;

wherein the TFA supply system comprises a TFA tank and a TFA supply piping connecting the TFA tank and the treatment gas supply piping, the treatment gas supply piping being downstream

the treatment agent vaporizer in a direction of treatment gas movement.

13. The treatment equipment of claim 12:

wherein at least in a portion downstream the vaporizer of
5 the treatment agent supply piping a heater is disposed.

14. The treatment equipment of claim 13:

wherein the treatment chamber is furnished with a heater
to heat a wall surface of the treatment chamber.

15. The treatment equipment of claim 12:

10 wherein the treatment agent tank is a tank containing a
treatment agent containing copper as a component.

16. The treatment equipment of claim 11, further
comprising:

a supply system for supplying an additive that promotes
15 complexing of copper.